

203 North Golden Circle Drive  
Santa Ana, CA 92705  
(714) 835-6886  
(213) 581-7164  
Fax: (714) 667-7147  
Telex: 68-3420

## Woodward-Clyde Consultants

18 April 1990  
Project No. 8941863J

Mr. Ejigu Solomon  
Regional Water Quality Control Board  
Los Angeles Region  
101 Centre Plaza Drive  
Monterey Park, California 91754

SUBJECT: "ONE-TIME DISCHARGE" OF TREATED GROUNDWATER AT  
DOUGLAS AIRCRAFT COMPANY'S TORRANCE (C6) FACILITY

Dear Mr. Solomon:

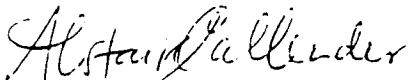
Woodward-Clyde has recently completed carbon adsorption treatment of approximately 22,000 gallons of groundwater pumped from an onsite observation well at the subject facility during aquifer testing. The water is presently stored in two transportable steel storage tanks. Water samples were collected from each of the tanks and submitted to West Coast Analytical Service, Inc. of Santa Fe Springs, California on 6 April 1990 for analysis of volatile organics by EPA Method 624. Copies of the chemical data sheets are attached. The results show that the water does not contain detectable concentrations of volatile organics.

On behalf of Douglas Aircraft Company, Woodward-Clyde requests permission to discharge this water to a Los Angeles County Flood Control District storm drain per our telephone conversation of 27 March 1990.

Please call me at 714 824-6886 if you have any questions.

Very truly yours,

WOODWARD-CLYDE CONSULTANTS



Alistaire Callender Ph.D.  
Project Manager

AC:kp

(2x/AC/RWOCB1)

Consulting Engineers, Geologists  
and Environmental Scientists

Offices in Other Principal Cities



April 12, 1990

WOODWARD-CLYDE CONSULTANTS  
203 N. Golden Circle Dr.  
Santa Ana, CA 92705

Attn: Dr. Alistaire Callender

JOB NO. 15200

RECEIVED  
APR 16 1990  
WCC-SANTA ANA

**WCAS**  
**WEST COAST**  
**ANALYTICAL**  
**SERVICE, INC.**

ANALYTICAL CHEMISTS

A

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LABORATORY REPORT

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Samples Received: Two (2) Water Samples in Duplicate  
Date Received: 4-6-90  
Purchase Order No: Proj#: 8941863J-0003/Douglas Aircraft

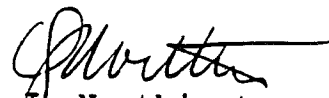
The samples were analyzed as follows:

<u>Samples Analyzed</u>	<u>Analysis</u>	<u>Results</u>
Two (2) waters	Volatile Organics by EPA 624	Data Sheets

Page 1 of 1

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Michael Shelton  
Technical Director

  
D. J. Northington, Ph.D.  
President

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CLIENT: WOODWARD-CLYDE CONSULTANTS  
WCAS JOB #: 15200

SAMPLE: T-1438A

DATE RECEIVED: 04/06/90  
DATE EXTRACTED: 04/11/90  
DATE ANALYZED: 04/11/90

RUN NUMBER: 15200V1  
SAMPLE AMOUNT: 5ML  
MATRIX: WATER

VOLATILE ORGANICS (EPA 624/8240)

UNITS: UG/L (PPB)

CAS #	COMPOUND	CONCENTRATION	DET LIMIT
67-64-1	ACETONE	ND	5.
71-43-2	BENZENE	ND	1.
75-27-4	BROMODICHLOROMETHANE	ND	1.
75-25-2	BROMOFORM	ND	1.
74-83-9	BROMOMETHANE	ND	5.
78-93-3	2-BUTANONE (MEK)	ND	5.
75-15-0	CARBON DISULFIDE	ND	1.
56-23-5	CARBON TETRACHLORIDE	ND	1.
108-90-7	CHLOROBENZENE	ND	1.
75-00-3	CHLOROETHANE	ND	5.
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	10.
67-66-3	CHLOROFORM	ND	1.
74-87-3	CHLOROMETHANE	ND	5.
108-41-8	CHLOROTOLUENE	ND	1.
124-48-1	DIBROMOCHLOROMETHANE	ND	1.
95-50-1	1,2-DICHLOROBENZENE	ND	1.
541-73-1	1,3-DICHLOROBENZENE	ND	1.
106-46-7	1,4-DICHLOROBENZENE	ND	1.
75-34-3	1,1-DICHLOROETHANE	ND	1.
107-06-2	1,2-DICHLOROETHANE	ND	1.
75-35-4	1,1-DICHLOROETHYLENE	ND	1.
156-59-4	CIS-1,2-DICHLOROETHYLENE	ND	1.
156-60-5	TRANS-1,2-DICHLOROETHYLENE	ND	1.
78-87-5	1,2-DICHLOROPROPANE	ND	1.
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1.
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1.
100-41-4	ETHYLBENZENE	ND	1.
106-93-4	ETHYLENE DIBROMIDE	ND	1.
76-13-1	FREON-TF	ND	1.
119-78-6	2-HEXANONE	ND	5.
75-09-2	METHYLENE CHLORIDE	ND	5.
108-10-1	4-METHYL-2-PENTANONE (MIBK)	ND	5.
100-42-5	STYRENE	ND	1.
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	1.
127-18-4	TETRACHLOROETHYLENE	ND	1.
109-99-9	TETRAHYDROFURAN	ND	5.
108-88-3	TOLUENE	ND	1.
71-55-6	1,1,1-TRICHLOROETHANE	ND	1.
79-00-5	1,1,2-TRICHLOROETHANE	ND	1.
79-01-6	TRICHLOROETHYLENE	ND	1.
75-69-4	TRICHLOROFLUOROMETHANE	ND	1.
108-05-4	VINYL ACETATE	ND	5.
75-01-4	VINYL CHLORIDE	ND	5.
95-47-6	TOTAL XYLENES	ND	1.

WCAS

08/11/90

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT: WOODWARD-CLYDE CONSULTANTS SAMPLE: T-1438A  
WCAS JOB #: 15200

UNITS: UG/L (PPB)

COMPOUND NAME	FRACTION	APPROXIMATE CONCENTRATION
1 NONE FOUND	VOA	

WCAS

CLIENT: WOODWARD-CLYDE CONSULTANTS  
WCAS JOB #: 15200

SAMPLE: T-31NA

DATE RECEIVED: 04/06/90  
DATE EXTRACTED: 04/11/90  
DATE ANALYZED: 04/11/90

RUN NUMBER: 15200V2  
SAMPLE AMOUNT: 5ML  
MATRIX: WATER

VOLATILE ORGANICS (EPA 624/8240)

UNITS: UG/L (PPB)

CAS #	COMPOUND	CONCENTRATION	DET LIMIT
67-64-1	ACETONE	ND	5.
71-43-2	BENZENE	ND	1.
75-27-4	BROMODICHLOROMETHANE	ND	1.
75-25-2	BROMOFORM	ND	1.
74-83-9	BROMOMETHANE	ND	5.
78-93-3	2-BUTANONE (MEK)	ND	5.
75-15-0	CARBON DISULFIDE	ND	1.
56-23-5	CARBON TETRACHLORIDE	ND	1.
108-90-7	CHLOROBENZENE	ND	1.
75-00-3	CHLOROETHANE	ND	5.
110-75-8	2-CHLOROETHYL VINYL ETHER	ND	10.
67-66-3	CHLOROFORM	ND	1.
74-87-3	CHLOROMETHANE	ND	5.
108-41-8	CHLOROTOLUENE	ND	1.
124-48-1	DIBROMOCHLOROMETHANE	ND	1.
95-50-1	1,2-DICHLOROBENZENE	ND	1.
541-73-1	1,3-DICHLOROBENZENE	ND	1.
106-46-7	1,4-DICHLOROBENZENE	ND	1.
75-34-3	1,1-DICHLOROETHANE	ND	1.
107-06-2	1,2-DICHLOROETHANE	ND	1.
75-35-4	1,1-DICHLOROETHYLENE	ND	1.
156-59-4	CIS-1,2-DICHLOROETHYLENE	ND	1.
156-60-5	TRANS-1,2-DICHLOROETHYLENE	ND	1.
78-87-5	1,2-DICHLOROPROPANE	ND	1.
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1.
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1.
100-41-4	ETHYLBENZENE	ND	1.
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76-13-1	FREON-TF	ND	1.
119-78-6	2-HEXANONE	ND	5.
75-09-2	METHYLENE CHLORIDE	ND	5.
108-10-1	4-METHYL-2-PENTANONE (MIBK)	ND	5.
100-42-5	STYRENE	ND	1.
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	1.
127-18-4	TETRACHLOROETHYLENE	ND	1.
109-99-9	TETRAHYDROFURAN	ND	5.
108-88-3	TOLUENE	ND	1.
71-55-6	1,1,1-TRICHLOROETHANE	ND	1.
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79-01-6	TRICHLOROETHYLENE	ND	1.
75-69-4	TRICHLOROFLUOROMETHANE	ND	1.
108-05-4	VINYL ACETATE	ND	5.
75-01-4	VINYL CHLORIDE	ND	5.
95-47-6	TOTAL XYLENES	ND	1.

WCAS

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT: WOODWARD-CLYDE CONSULTANTS SAMPLE: T-31NA  
WCAS JOB #: 15200

UNITS: UG/L (PPB)

COMPOUND NAME	FRACTION	APPROXIMATE CONCENTRATION
1 NONE FOUND	VOA	

WCAS

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—  
LOS ANGELES REGION101 CENTRE PLAZA DRIVE  
MONTEREY PARK, CALIFORNIA 91754-2156  
(213) 266-7500

RECEIVED

MAY 8 1990

WCC-SANTA ANA

May 7, 1990

Mr. Daniel Palacios  
Environmental Compliance  
Douglas Aircraft  
3855 Lakewood Boulevard  
Long Beach, CA 90846

ONE-TIME DISCHARGE OF TREATED GROUND WATER TO STORM DRAIN AT  
DOUGLAS AIRCRAFT COMPANY'S C6 TORRANCE FACILITY (I.D.# 905020025),  
19503 SOUTH NORMANDIE AVENUE, TORRANCE, CA

We have reviewed a letter dated April 18, 1990 requesting permission to discharge treated ground water, collected during aquifer testing, to the storm drain. In review of your request, and the included water analysis, we have the following comments:

Woodward-Clyde Consultants provided this Regional Board with the aquifer test analysis. According to this analysis, none of the constituents exceeded the Department of Health Services' Action Levels. Based on this effluent analysis, permission is conditionally granted to discharge treated effluent to the storm drain.

The discharge shall be limited to the approximate 22,000 gallons currently stored on-site. The discharger shall submit a report summarizing discharge operations to this Board by June 11, 1990. If discharge conditions change, this Board must be notified for further review and approval before discharging. Any permit that may be required by a local agency shall be obtained prior to any discharge.

If you have any questions, please contact me at (213) 266-7522.

*Hank H. Yacoub*  
for HANK H. YACOUB  
Supervising Water Resource  
Control Engineer

cc: Mr. Gary Yamamoto, Department of Health Services, Sanitary  
Engineering Branch  
Mr. Carl Sjoberg, County of Los Angeles, Department of Public  
Works, Underground Tank Unit  
✓ Dr. Alistaire Callender, Woodward-Clyde Consultants

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## Woodward-Clyde Consultants

21 May 1990  
Project No. 8941863J

Mr. Rudolph Lee  
Tenth Floor Permit Unit  
Mapping and Property Management Division  
Los Angeles County Department of Public Works  
900 South Fremont Avenue  
Alhambra, California 91803-1331

**SUBJECT: DISCHARGE OF TREATED GROUNDWATER AT DOUGLAS AIRCRAFT  
COMPANY'S FACILITY AT 19503 S. NORMANDIE AVE.,  
TORRANCE, CALIFORNIA**

Dear Mr. Lee:

This letter serves as a request to discharge approximately 22,000 gallons of groundwater generated during aquifer testing activities. The water, which contained low levels (<200 ug/l) of volatile organic compounds, was treated using activated carbon. The California Regional Water Quality Control Board, Los Angeles Region has granted permission for the discharge under a "One-Time Discharge" (see attached letter), since treatment of the water has reduced the concentrations of organics to below detectable concentrations.

We propose to discharge the water at a rate of 5 to 10 gallons per minute to a catch basin located on Douglas Aircraft Company's facility at 19503 S. Normandie Ave., Torrance, California. The catch basin is connected to the Dominguez flood control channel via storm drain.

Please call me at (714) 835-6886 with your comments and/or approval.

Very truly yours,

**WOODWARD-CLYDE CONSULTANTS**

*Alistaire Callender*  
Alistaire Callender, Ph.D.  
Project Manager

AC:kp  
Attachment

(2k/ABC/D-1a)

cc: Janet Bell, Douglas Aircraft Co.  
Boramy Ith, Douglas Aircraft Co.  
Dan Palacios, Douglas Aircraft Co.

Consulting Engineers, Geologists  
and Environmental Scientists

Offices in Other Principal Cities



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## Woodward-Clyde Consultants

30 May 1990  
Project No. 8941863J

Mr. Rudolph Lee  
Tenth Floor Permit Unit  
Mapping and Property Management Division  
Los Angeles County Department of Public Works  
900 South Fremont Avenue  
Alhambra, California 91803-1331

**SUBJECT: DISCHARGE OF APPROXIMATELY 22,000 GALLONS OF  
TREATED GROUNDWATER AT DOUGLAS AIRCRAFT COMPANY'S  
TORRANCE (C6) FACILITY**

Dear Mr. Lee:

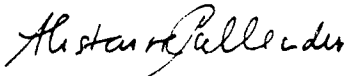
This letter serves to document my telephone conversation with you on 22 May 1990 concerning the discharge of the subject groundwater. Woodward-Clyde understands that no permit is required in addition to the permission granted by the Regional Water Quality Control Board in a letter dated 7 May 1990.

At your request, we have notified Ray Rodriguez of the Hydraulic Water Conservation Division of the forthcoming discharge. On 23 May 1990 Woodward-Clyde provided Mr. Rodriguez with the location of the drain which will be receiving this water. The discharge was scheduled to begin on 24 May 1990 but at Mr. Rodriguez request it was delayed until 30 May 1990.

Please call me if you have any questions (714) 835-6886.

Very truly yours,

**WOODWARD-CLYDE CONSULTANTS**



Alistaire Callender, Ph.D.  
Project Manager

AC:kp

(24) C:\MS2\MSDATA\ABC\D-2.DOC 05/30/90

cc: Boramy Ith, Douglas Aircraft Co.  
Dan Palacios, Douglas Aircraft Co.

Consulting Engineers, Geologists  
and Environmental Scientists

Offices in Other Principal Cities



BOE-C6-0107776